**FIG. 1**

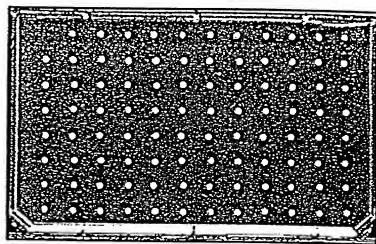
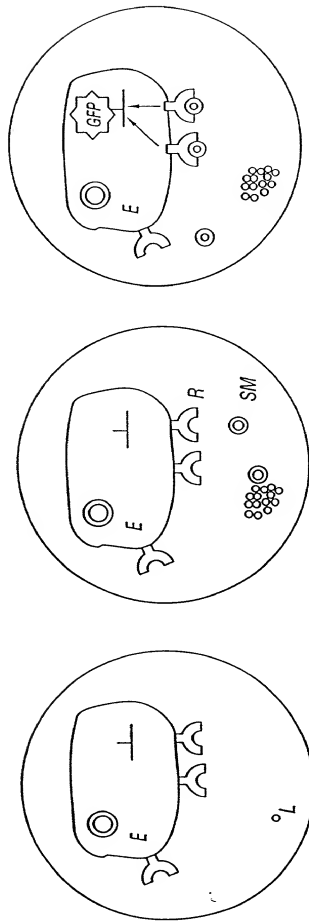


FIG. 2

0975036-101001



Receptor binding of small molecule & GFP reporting

Growth and expression of small molecule from host

Co-encapsulation Library + Eukaryote

E=Eukaryotic assay organism L=Large insert library SM=Small molecule
GFP= Green fluorescent protein R=Eukaryotic receptor

FIG. 3

100101 9E05Z660

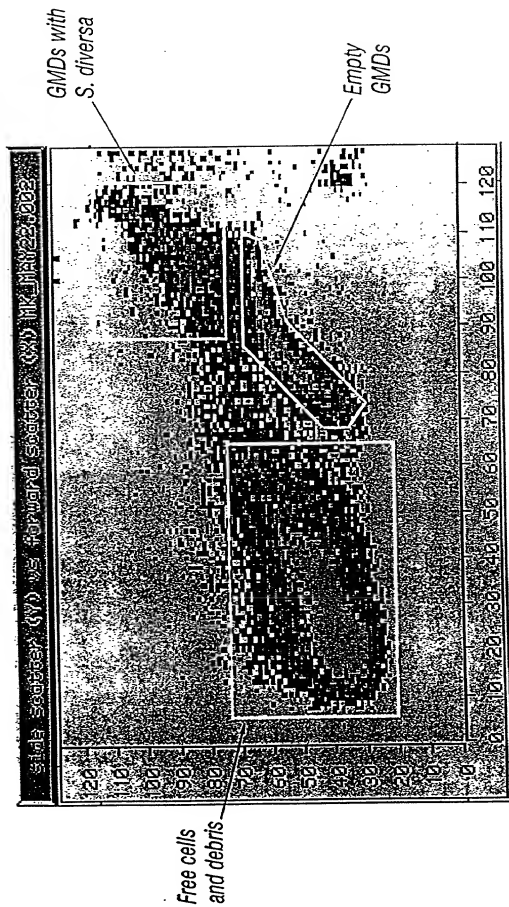
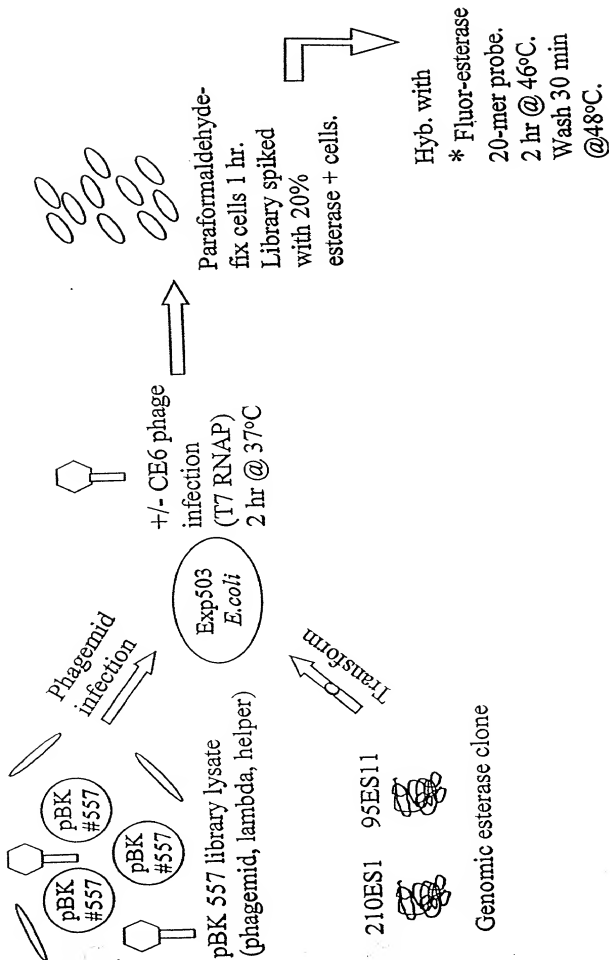


FIG. 4

Whole Cell Hybridization Protocol
(+ control)

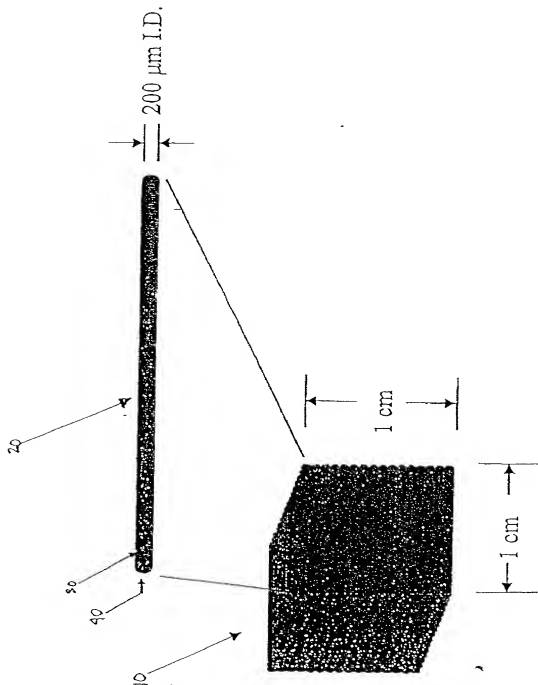


Figure 6A

09975036-101001

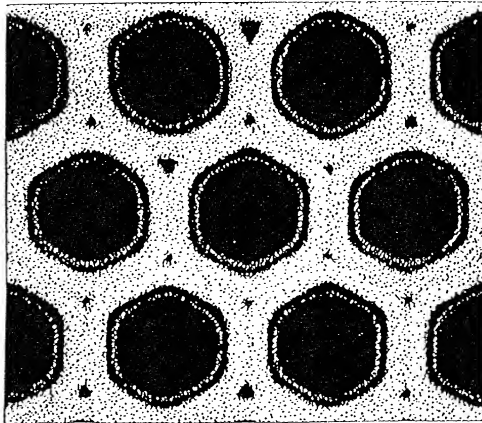


Figure
6B

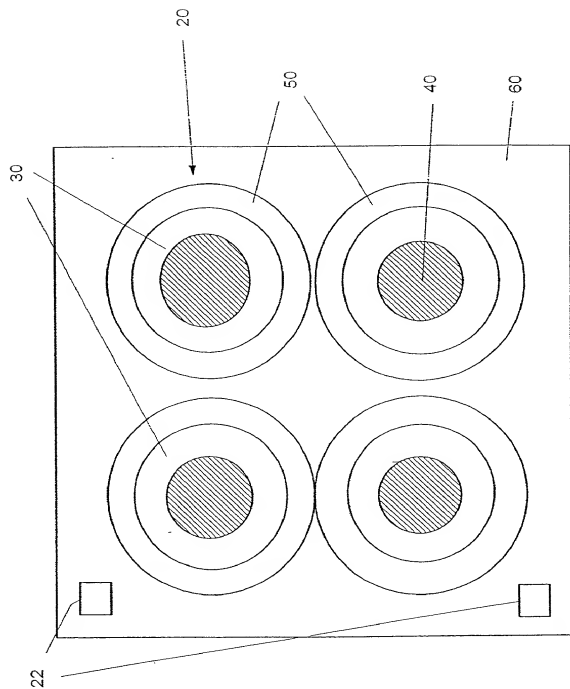
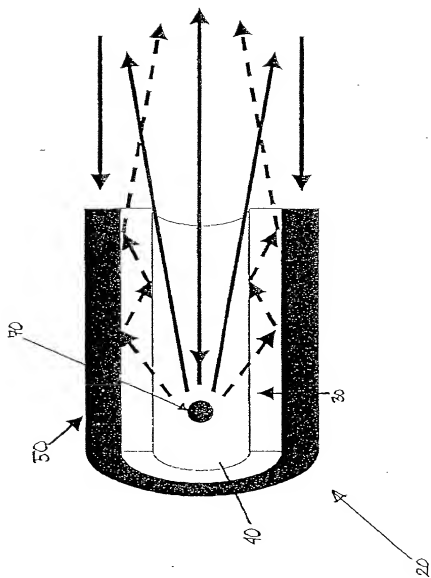


FIG. 7

Figure 8



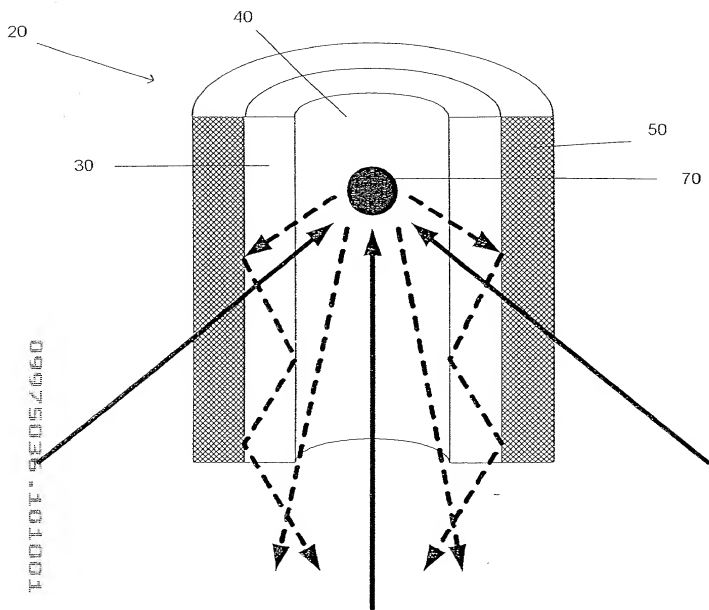
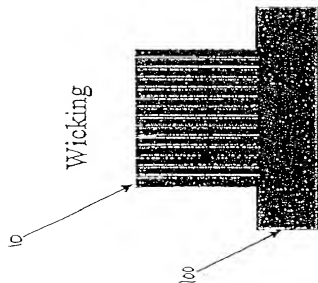
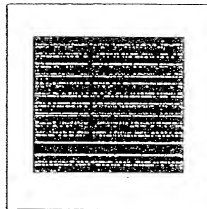


Figure
9



Wicking

Humidified Incubation



Imaging &
Recovery



Figure
10

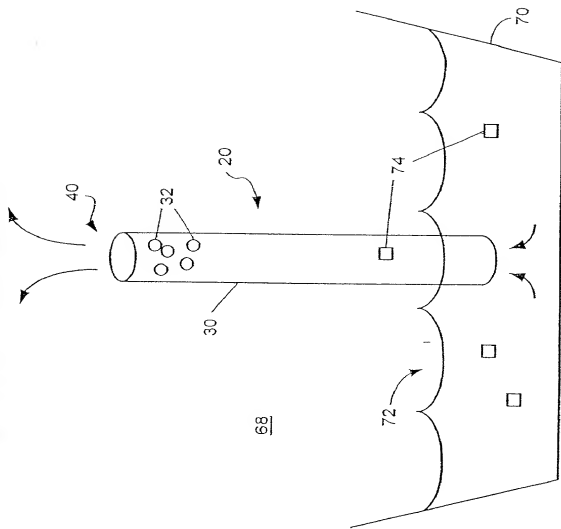


Figure
11

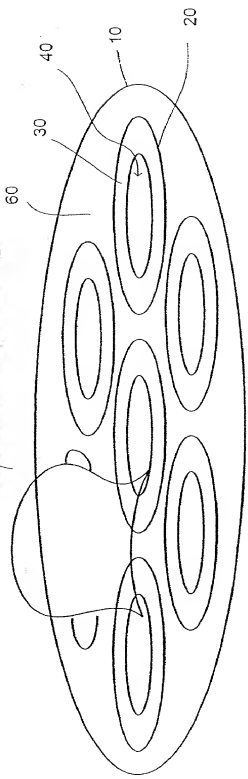


Figure 12A

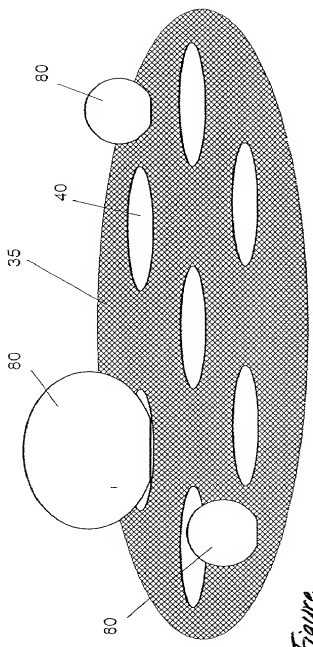
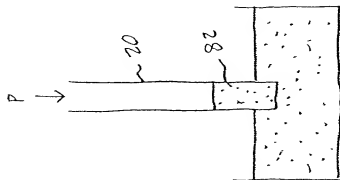


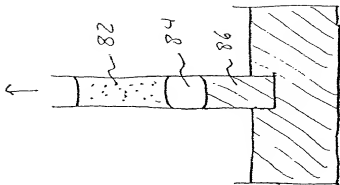
Figure 12B



A.



B.



C.

Figure
13

Capillary array.

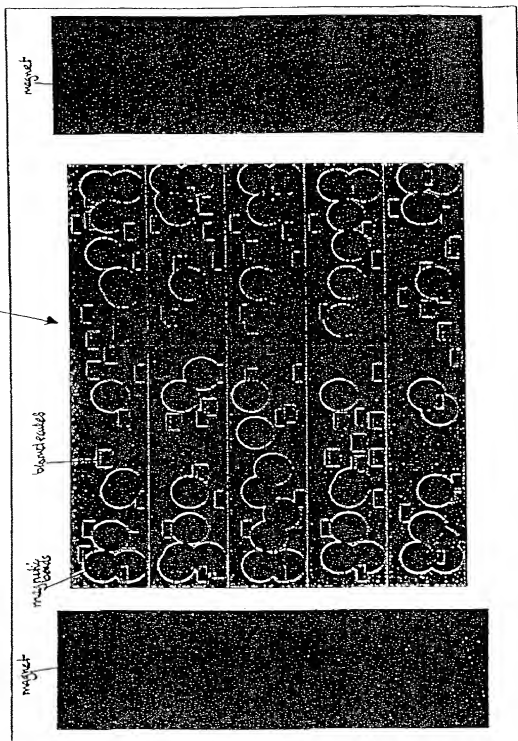


Figure
14A

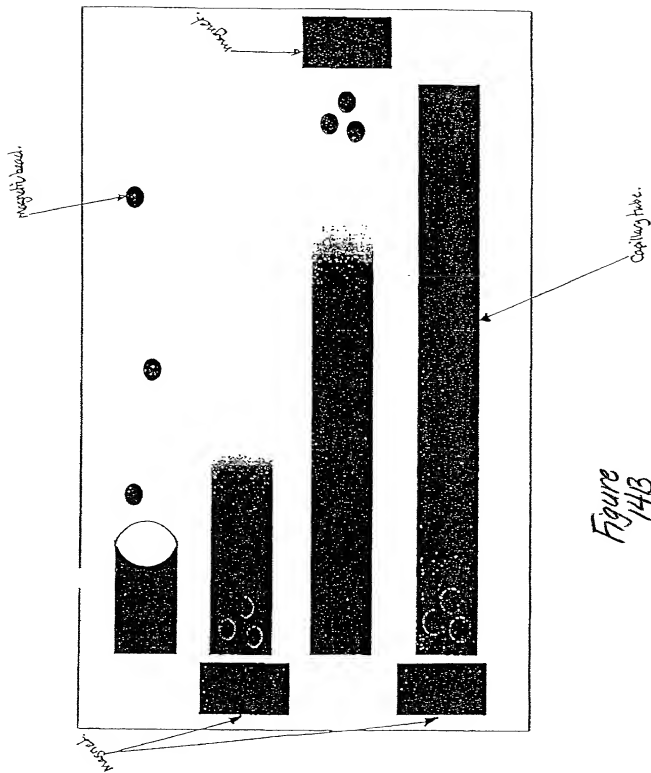


Figure
14B

09975036.101001

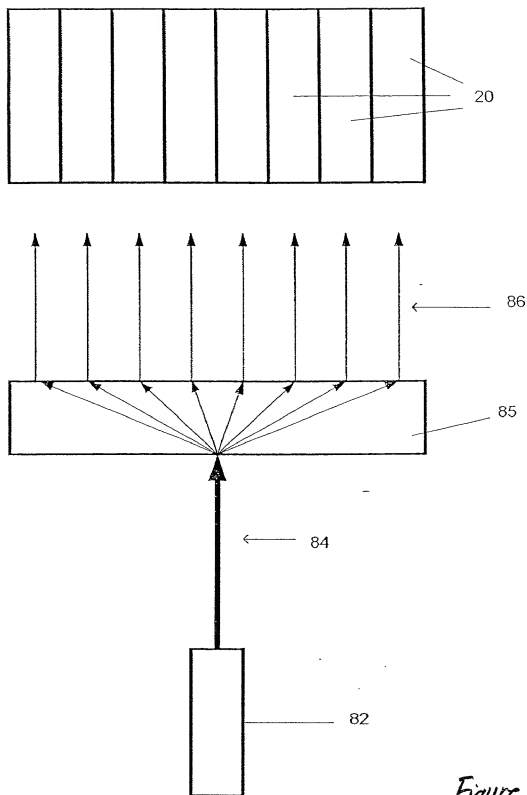


Figure
15

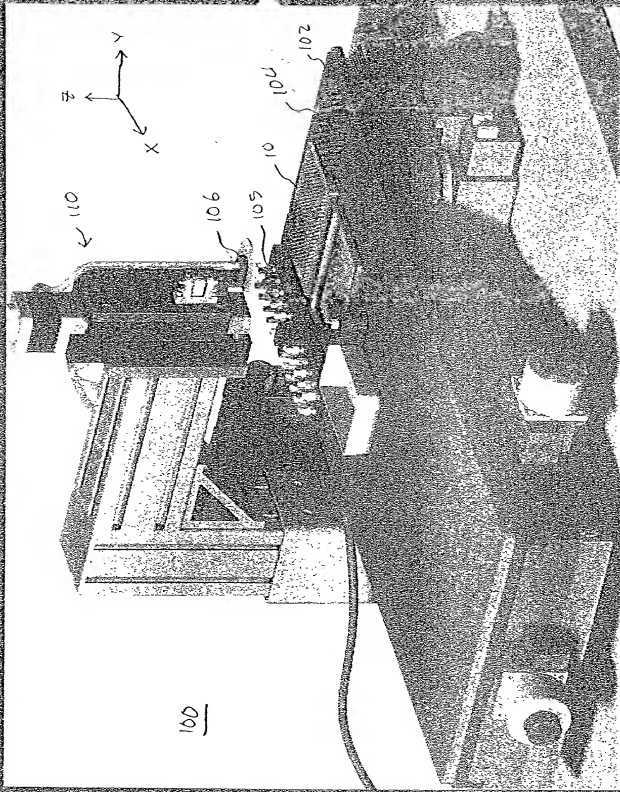
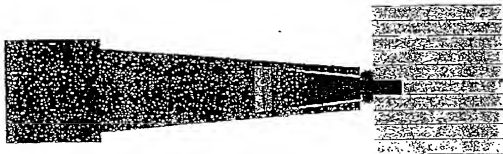
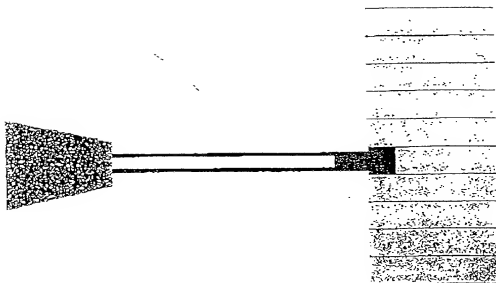


Figure 16

09975036.101001

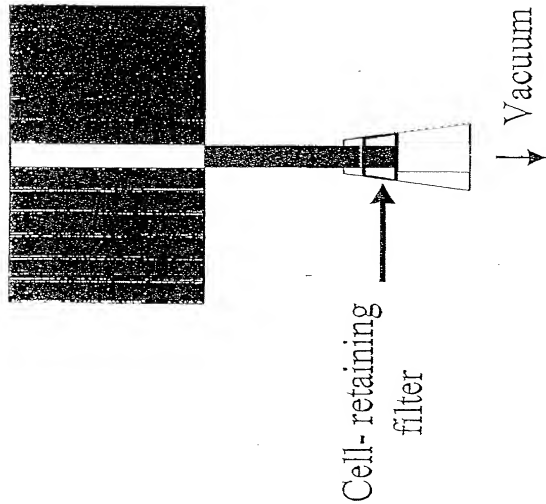


A



B

Figure
17

*Figure
17c*

09975036.101001

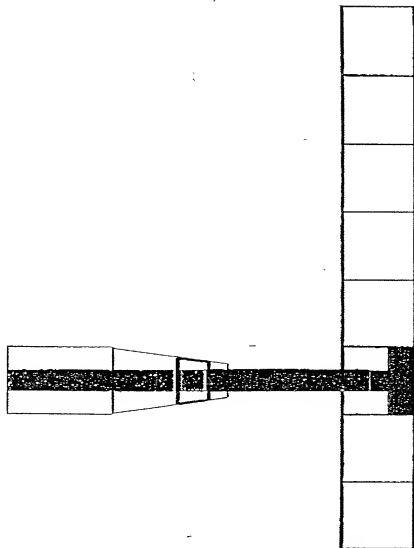


Figure
17D

HTP Enrichment of Low Copy Gene Targets

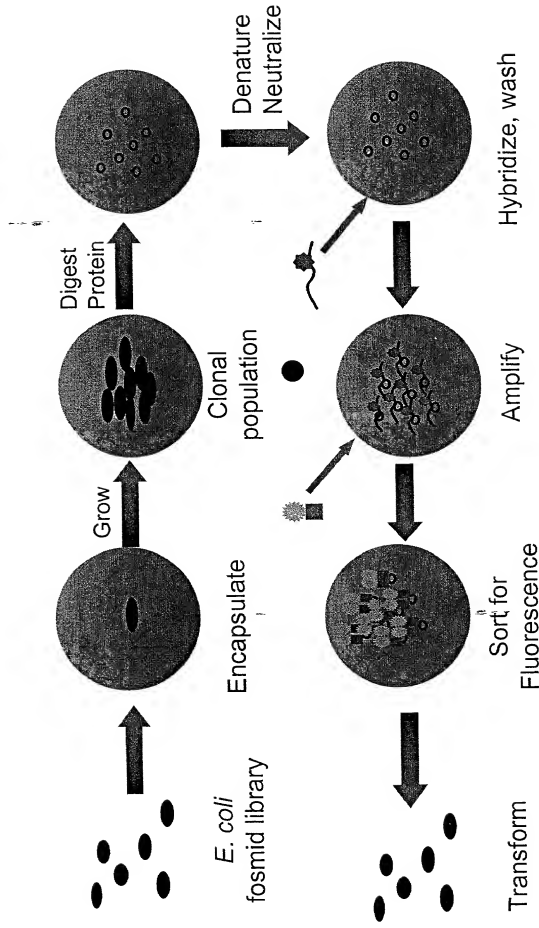
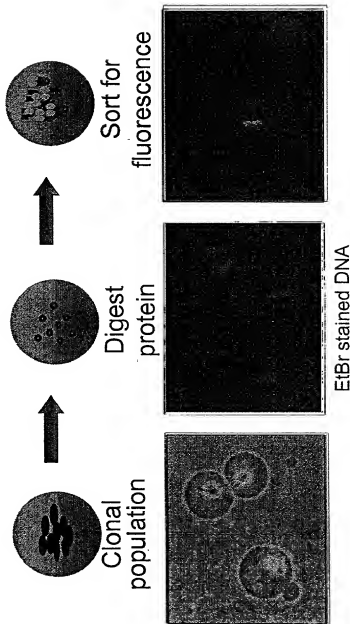


FIG. 18

FACS-Biopanning



Alignment of Environmental PKS Sequence

1. The first step in the alignment of environmental PKS sequences is to identify the sequences of interest. This can be done by searching databases for sequences that contain the characteristic motifs of PKSs, such as the ketide synthase (KS) domain.

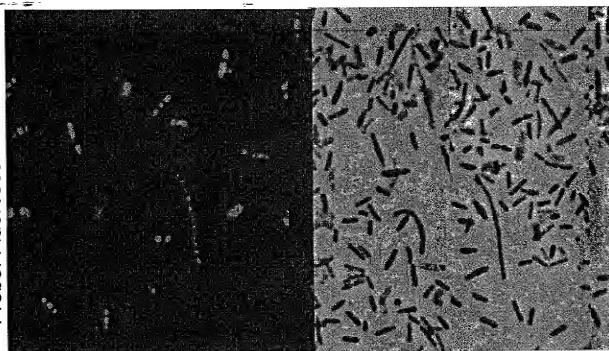
2. Once the sequences of interest have been identified, the next step is to align them. This can be done using a variety of methods, including sequence alignment software (e.g. ClustalW) or manual alignment.

3. The final step in the alignment of environmental PKS sequences is to analyze the results. This can be done by comparing the sequences to known sequences and identifying any differences.

4. The results of the alignment can be used to identify the function of the sequences and to determine the evolutionary relationships between them.

Whole Cell Hybridization

Library 557 + 95ES11 clone
Probe: Fluorescein-95ES11



Fluorescein
Excitation

White
light

FIG. 20

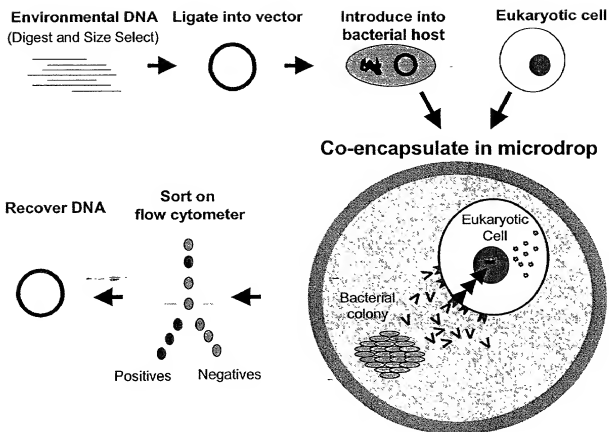


FIG. 21

Whole Cell Hybridization Protocol

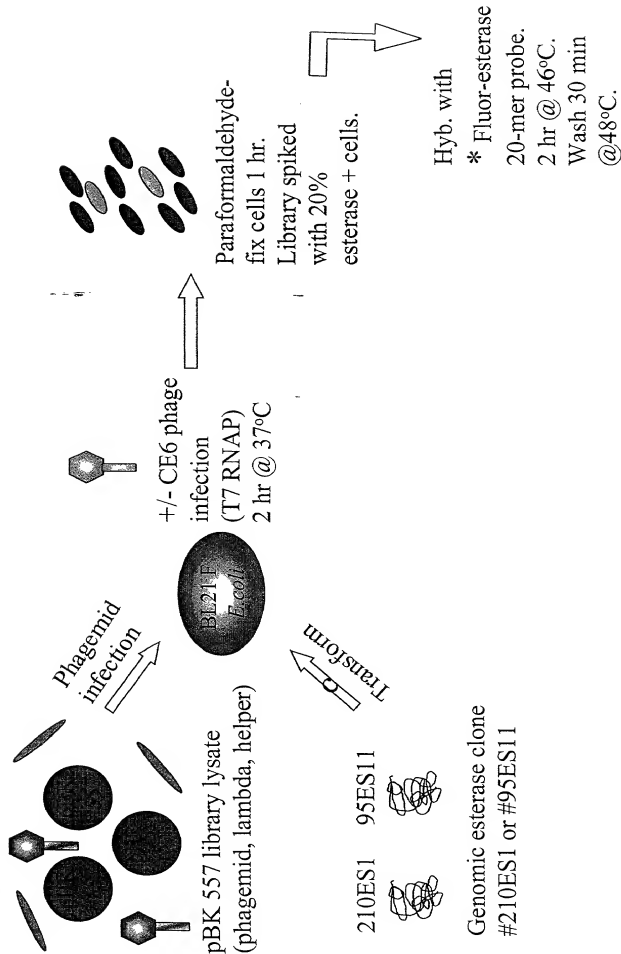


FIG. 22

T7 RNA Polymerase Expression System

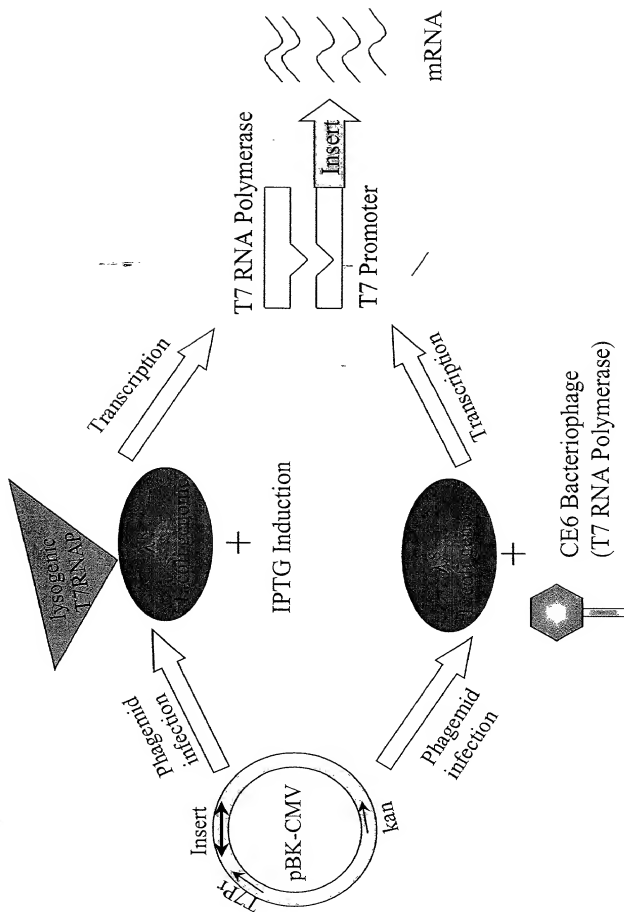


FIG. 23